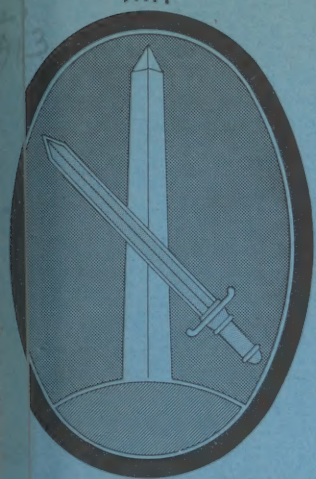


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MONTHLY HEALTH REPORT

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MILITARY DISTRICT OF WASHINGTON

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MONTHLY HEALTH REPORT

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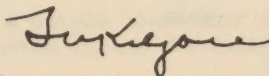
HEADQUARTERS, MILITARY DISTRICT OF WASHINGTON
The Pentagon, Washington 25, D. C.

INTRODUCTION

This publication presents periodic health data concerning personnel of the Department of the Army and Department of the Air Force personnel in the Military District of Washington. It provides factual information for measurement of increase or decrease in the frequency of disease and injury occurring at each of the posts, camps or stations shown herein.

It is published monthly by the Military District of Washington for the purpose of conveying to personnel in the field current information on the health of the various military installations in this area and on matters of administrative and technical interest. Items published herein do not modify or rescind official directives, nor will they be used as the basis for requisitioning supplies or equipment.

Contributions, as well as suggested topics for discussion, are solicited from Medical Department officers in the field.



FLOYD V. KILGORE
Colonel, MC
Surgeon

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PREVENTIVE MEDICINE

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GENERAL COMMENT

Unless otherwise indicated, references to diseases and injuries in this publication apply to all Class I and II installations exclusive of Walter Reed General Hospital. Rates are calculated on the basis of a thousand mean strength per year.

In consideration of the present mode of operation of the Army Medical Department whereby Army and/or Air Force personnel may be receiving medical treatment at either type department installation, differential health statistics for the Air Force and Army should be evaluated as an overall index of the medical sections of the reporting unit.

The general health of the command has continued to be excellent. No unusual incidence of disease or injury has been reported and the non-effective rate for the current period, 10.80 shows only a very slight rise from last month.

The annual admission rate per thousand troops for all causes during February rose 4 points from that reported in January; 371.7 as compared with 267.7. An increased number of admissions for the period at Fort Belvoir and Fort Myer (North Post) accounted for this rise. The former station reported a current rate of 307.2 compared with 382.1 for January and the latter station increased to a rate of 1016.1 from 789.7.

Disease admissions reflected a slight decrease over that reported in January. A current rate 334.5 is compared with the 340.7 rate for last month. Fort McNair reported the greatest decrease in admissions for this cause with a drop from 619.7 in rate of last month to 458.1 for the month of February. Fort Myer, (North Post) had the highest rate of MDW units during the period with a rate of 933.9.

Rates for injury admissions rose from a 27.0 last month to 37.2 for the present period. A total of 43 cases is compared with 62 cases for February. Of the total cases, in the current month, Fort Belvoir reported 21 for a rate of 30.1. This represents almost a three fold increase over the January 10.9 rate.

Incidence of psychiatric disease dropped to a little over half of the January admission rate. A total of 11 cases and a rate of 6.6 were reported during February as compared to 20 cases and a 12.5 rate for the previous month.

One death was reported by MDW units during the period 30 January to 25 February 1949 by Fort Myer, (North Post).

COMMUNICABLE DISEASE

In general, no unusual incidence in communicable disease was noted during the period.

Total common respiratory disease admissions remained almost unchanged with a total of 128 cases and a rate of 76.7 reported for February against 127 cases and 79.7 rate in January. No station in the Military District of Washington exhibited unexpected changes.

Pneumonia, all types remained relatively unchanged with a current rate of 6.0 only slightly lower than 6.9 of last month. Of the total 10 cases reported for the period, 7 were pneumonia atypical with a rate of 4.2.

The current rate of 9.0 for 15 cases of Influenza is a slight rise over the last report of 12 cases and 7.7 rate for January. Incidence of this disease has continued to be relatively low during the winter period in the MDW area.

Admissions for Measles increased to almost double the rate for last month with respective rates of 9.6 and 5.0. Total cases reported for the current period was 16. Of this total, Fort Belvoir Station Hospital admitted 14 cases for a rate of 20.1 at that station.

Pertinent Statistical tables may be found on pages 2 and 4.

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RESTRICTED**PREVENTIVE MEDICINE****GENERAL DATA**

4 Week Period Ending 25 February 1949
(Data from WD AGO Form 8-122)

STATION	MEAN STRENGTH			ADMISSIONS						Non-Effective Rate	Number of CDD's	Number of Deaths
	Total	White	Negro	All Causes		Disease		Injuries				
				Cases	Rate	Cases	Rate	Cases	Rate			
Fort Belvoir	9,055	8,009	1,046	214	307.2	193	277.1	21	30.1	21.33	5	0
Fort McNair	1,050	960	90	45	557.1	37	458.1	8	99.1	7.62	0	0
Fort Myer (North Post)	1,740	1,522	218	136	1,016.1	125	933.9	11	82.2	7.37	0	1
Fort Myer (South Post)	2,017	2,017	0	74	476.9	72	464.0	2	12.9	2.21	0	0
General Dispensary, USA	5,816	5,785	31	95	212.3	90	201.2	5	11.1	2.09	0	0
All Others	2,005	2,005	0	56	363.1	41	265.8	15	97.3	1.80	0	0
Total Mil Dist of Wash	21,683	20,298	1,385	620	371.7	558	334.5	62	37.2	10.80	5	1
Army Medical Center	2,772	2,511	261	141	661.3	127	595.6	14	65.7	451.81	80	4
Total Dept/Army Units	24,455	22,809	1,646	761	404.5	685	364.1	76	40.4	60.79	85	5
CLASS III UNITS												
Andrews Air Force Base	3,932	3,942	0	87	287.6	76	251.2	11	36.4	3.18	0	2
Bolling Air Force Base	5,607	5,605	2	163	377.9	148	343.1	15	34.8	9.97	0	0
1254th MATS	617	617	0	7	147.5	7	147.5	0	-	0.23	0	0
Total Dept/Air Force Units	10,166	10,164	2	257	328.6	231	295.4	26	33.2	6.74	0	2
Consolidated Total	34,621	32,973	1,648	1,018	382.2	916	343.9	102	38.3	44.92	85	7

ADMISSIONS, SPECIFIED DISEASES - RATE PER 1000 PER YEAR

4 Week Period Ending 25 February 1949
(Data from WD AGO Form 8-122)

STATION	Common Respiratory Disease	Pneumonia All Types	Pneumonia Atypical	Influenza	Measles	Mumps	Scarlet Fever	Tuberculosis	Rheumatic Fever	Diarrheal Disease	Hepatitis	Malaria	Psychiatric Diseases
Fort Belvoir	48.8	8.6	4.3	-	20.1	4.3	-	-	-	-	2.9	-	15.8
Fort McNair	86.7	-	-	-	-	-	-	-	-	49.5	-	-	-
Fort Myer (North Post)	246.6	22.4	22.4	59.8	14.9	7.5	-	7.5	-	7.5	-	-	-
Fort Myer (South Post)	51.6	-	-	25.8	-	-	-	-	-	-	6.4	-	-
General Dispensary, USA	82.7	2.2	2.2	6.7	-	2.2	-	-	-	-	-	-	-
All Others	58.4	-	-	-	-	-	-	-	-	-	-	-	-
Total Mil Dist of Wash	76.7	6.0	4.2	9.0	9.6	3.0	-	0.6	-	3.0	1.8	-	6.6
Army Medical Center	4.7	4.7	-	-	-	-	-	4.7	-	-	-	-	-
Total Dept/Army Units	68.6	5.8	3.7	8.0	8.5	2.7	-	1.1	-	2.7	1.6	-	5.8
CLASS III UNITS													
Andrews Air Force Base	62.8	-	-	9.9	-	-	-	-	-	6.6	-	-	-
Bolling Air Force Base	30.1	4.6	4.6	18.5	13.9	6.9	-	-	4.6	13.9	4.6	-	16.2
1254th MATS	63.2	-	-	-	-	-	-	-	-	-	-	-	-
Total Dept/Air Force Units	44.8	2.6	2.6	14.1	7.7	3.8	-	-	2.6	10.2	2.6	-	8.9
Consolidated Total	61.6	4.9	3.4	9.8	8.3	3.0	-	0.8	0.8	4.9	1.9	-	6.8

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VENEREAL DISEASE: ARMY TROOPS

Venereal Disease cases among Department of the Army personnel excluding Walter Reed General Hospital continued to increase with a total of 37 cases reported for the 4 week current period. The February rate of 22.18 is compared with the 21.96 rate for 35 cases reported in January.

White personnel incurred 27 cases for a rate of 18.29 and 10 cases occurred among negro personnel with a rate of 93.86. A comparison of these two rates indicates an increased number of cases in white personnel over the January 16.09 rate and a decrease from the 107.60 rate for negro incidence. All stations except Ft. Belvoir, although reporting incidence of the disease, reflected lowered or unchanged rates.

Of the total cases, 27 were reported from among personnel at that station with a resultant rate of 38.6 for the current month. This is a sharp upward trend from the 29.63 rate of the previous months.

VENEREAL DISEASE: AIR FORCE TROOPS

Among personnel of the Department of the Air Force installations within the Military District of Washington, the total venereal disease rate also reflected an upward trend. A total of 23 cases were incurred by all personnel for a rate of 29.41 in February. This compared with a 23.91 rate reported for January. Only 1 case of this total is reported as occurring among Negro personnel however, the rate of 6500 results since total strength Department of the Air Force Negro personnel is only 2. As a result this rate does not present an accurate gauge for comparison purposes.

Of the Air Force Units, Andrews Air Force Base had the highest rate, 32.98 for 10 cases and the lowest rate 21.07 for 1 case being reported by the MATS unit at the Washington National Airport.

Pertinent statistical tables and charts may be found on pages 4, 5, 6, and 7.

The term "Chargeable Cases" as used in this report refers to those occurring among individuals assigned or attached to the reporting station at the time of the diagnosis.

NEW VENEREAL DISEASE CASES - EXCL EPTS - FEBRUARY AND JANUARY*

	Rates per 1000 per year	
	FEBRUARY 49	JANUARY 49
Fort Belvoir	38.76	29.63
Fort McNair	12.38	64.55
Fort Myer (North Post)	22.41	44.70
Fort Myer (South Post)	12.89	13.38
General Dispensary, USA	2.24	2.25
All Others	19.45	54.60
<u>Total Mil Dist/Wash Units</u>	<u>22.18</u>	<u>21.96</u>
<u>Army Medical Center</u>	<u>18.76</u>	<u>33.38</u>
<u>Total D/A Units, MDW</u>	<u>21.79</u>	<u>23.29</u>
CLASS III UNITS		
Andrews Air Force Base	32.98	23.15
Bolling Air Force Base	27.82	27.00
1254th MATS	21.07	-
<u>Total D/AF Units, MDW</u>	<u>29.41</u>	<u>23.91</u>
<u>Consolidated Total</u>	<u>24.03</u>	<u>23.48</u>

* Includes all cases reported on Statistical Health Reports (WDAGO Form 8-122)

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CHART 1

ADMISSION RATES BY MONTH, ALL CAUSES, COMMON RESPIRATORY DISEASE AND INJURY
MDW RATE PER 1000 TROOPS PER YEAR

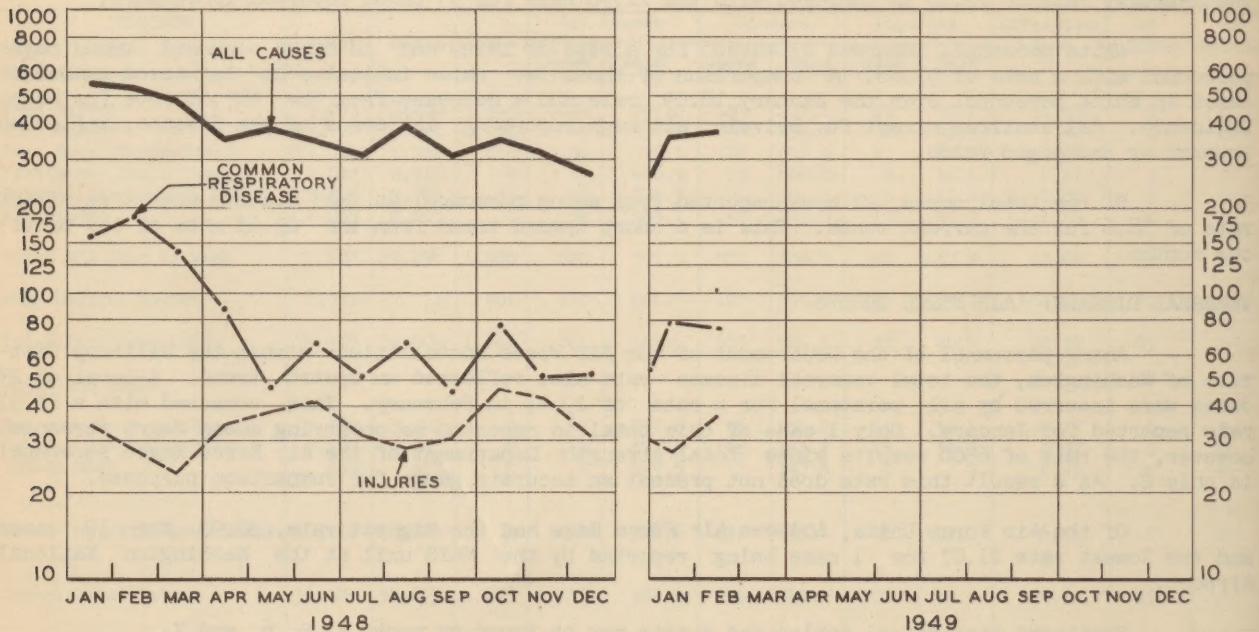
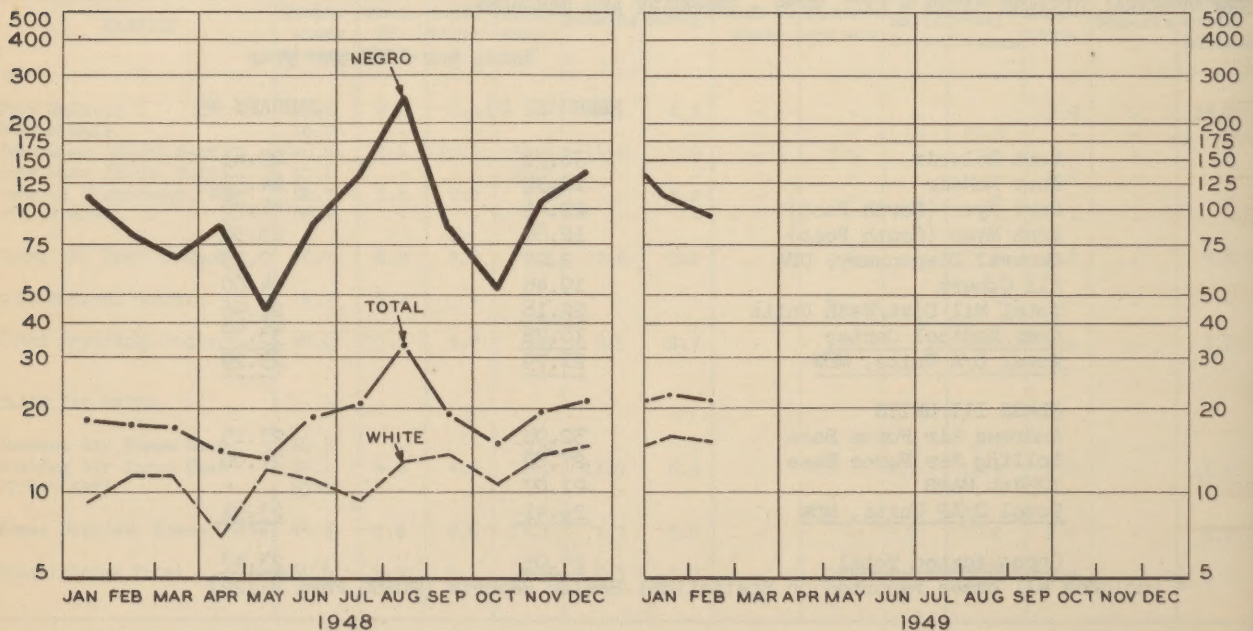


CHART 2

ADMISSION RATES BY MONTH VENEREAL DISEASES MDW INCL. ARMY MEDICAL CENTER
RATES PER 1000 TROOPS PER YEAR
INCLUDES ALL CASES REPORTED ON WD AGO 8-122 EXCEPTING THOSE EPTS



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CONSOLIDATED MONTHLY VENEREAL DISEASE STATISTICAL REPORT

For the Four Week Period ending 25 February 1949

(Data from WD AGO 8-122)(Chargeable Cases)

STATION	R A C E	Mean Strength	Number of Cases-EPTS Not Included				Rate per 1000 Troops per Annum	Total Days Lost From Duty (Old & New Cases)
			Syphilis	Gonorrhea	Other	Total		
Fort Belvoir	W	8,009	5	14	0	19	30.84	32
	N	1,046	0	8	0	8	99.43	0
	T	9,055	5	22	0	27	38.76	32
Fort McNair	W	960	0	0	0	0	-	0
	N	90	0	1	0	1	144.44	0
	T	1,050	0	1	0	1	12.38	0
Fort Myer (North Post)	W	1,522	0	2	0	2	17.08	0
	N	218	0	1	0	1	59.63	0
	T	1,740	0	3	0	3	22.41	0
Fort Myer (South Post)	W	2,017	1	1	0	2	12.89	0
	N	0	0	0	0	0	-	0
	T	2,017	1	1	0	2	12.89	0
General Dispensary, USA	W	5,785	0	1	0	1	2.25	0
	N	31	0	0	0	0	-	0
	T	5,816	0	1	0	1	2.24	0
All Others	W	2,005	0	3	0	3	19.45	0
	N	0	0	0	0	0	-	0
	T	2,005	0	3	0	3	19.45	0
Total Mil Dist of Wash	W	20,298	6	21	0	27	18.29	32
	N	1,385	0	10	0	10	93.86	0
	T	21,683	6	31	0	37	22.18	32
Army Medical Center	W	2,511	1	0	0	1	5.18	639
	N	261	0	1	2	3	149.43	501
	T	2,772	1	1	2	4	18.76	1,140
Total Dept/Army Units	W	22,809	7	21	0	28	15.96	671
	N	1,646	0	11	2	13	102.67	501
	T	24,455	7	32	2	41	21.79	1,172
CLASS III UNITS Andrews Air Force Base	W	3,942	1	9	0	10	32.98	11
	N	0	0	0	0	0	-	0
	T	3,942	1	9	0	10	32.98	11
Bolling Air Force Base	W	5,605	1	9	1	11	25.51	50
	N	2	0	1	0	1	6500.00	5
	T	5,607	1	10	1	12	27.82	55
1254th MATS	W	617	0	1	0	1	21.07	0
	N	0	0	0	0	0	-	0
	T	617	0	1	0	1	21.07	0
Total Dept/Air Force Units	W	10,164	2	19	1	22	28.14	61
	N	2	0	1	0	1	6500.00	5
	T	10,166	2	20	1	23	29.41	66
CONSOLIDATED TOTAL	W	32,973	9	40	1	50	19.71	732
	N	1,648	0	12	2	14	110.44	506
	T	34,621	9	52	3	64	24.03	1,238

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VENEREAL DISEASE RATES FOR THE US*

(All Army Troops)

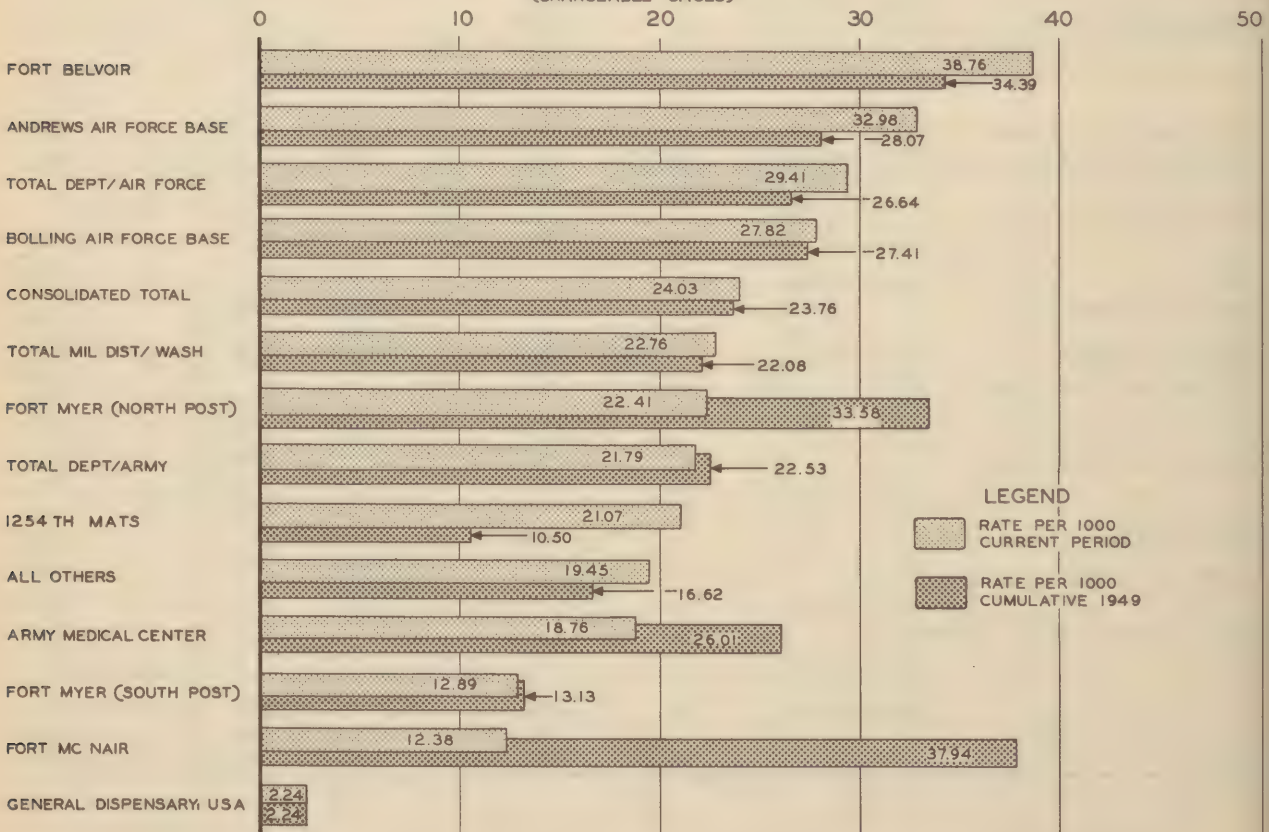
	FEBRUARY 1949	JANUARY 1949
First Army Area	24	33
Second Army Area	22	37
Mil District of Washington	23	23
Third Army Area	27	37
Fourth Army Area	18	23
Fifth Army Area	20	25
Sixth Army Area	22	25

Total United States	22	30
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* Compiled in the Office of the Surgeon General and includes general Hospital and Class III installations.

VENEREAL DISEASE RATES PER 1000 PER YEAR FOUR WEEK & CUMULATIVE TOTALS ENDING 25 FEBRUARY 49

TOTAL WHITE & NEGRO PERSONNEL
(CHARGEABLE CASES)



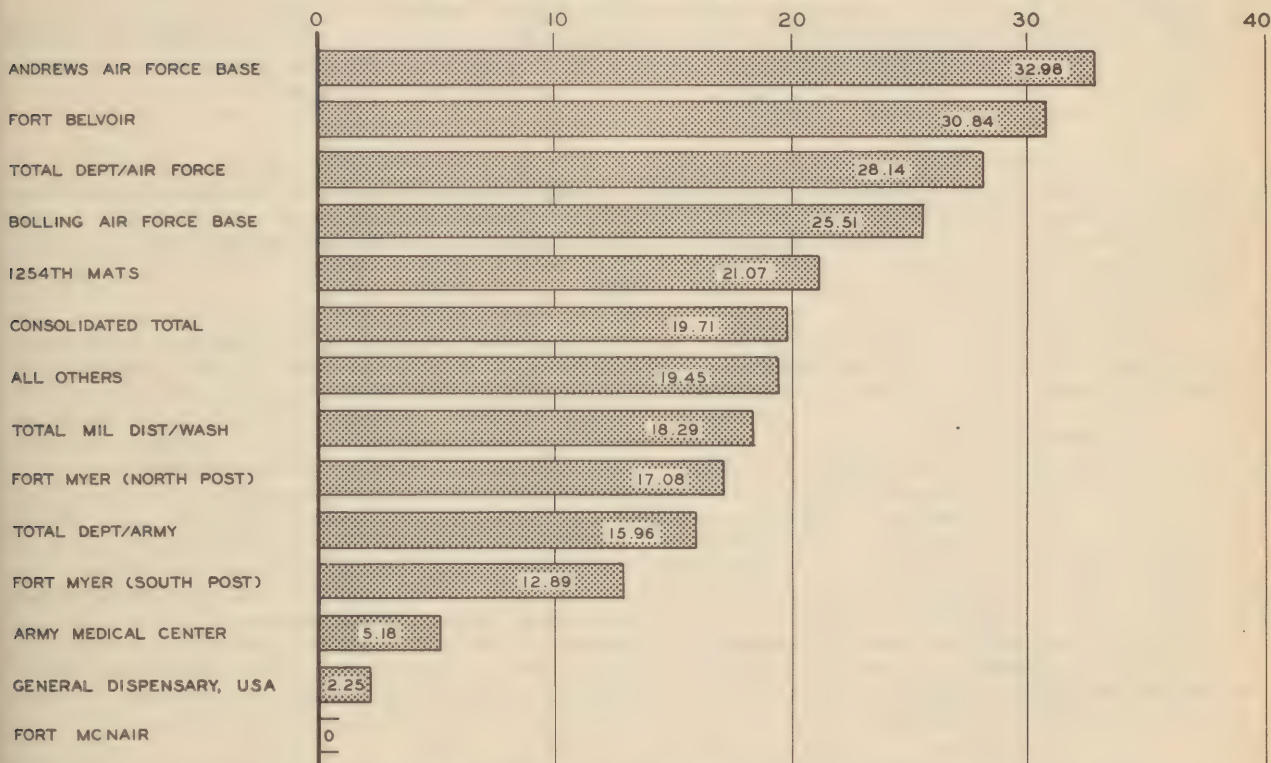
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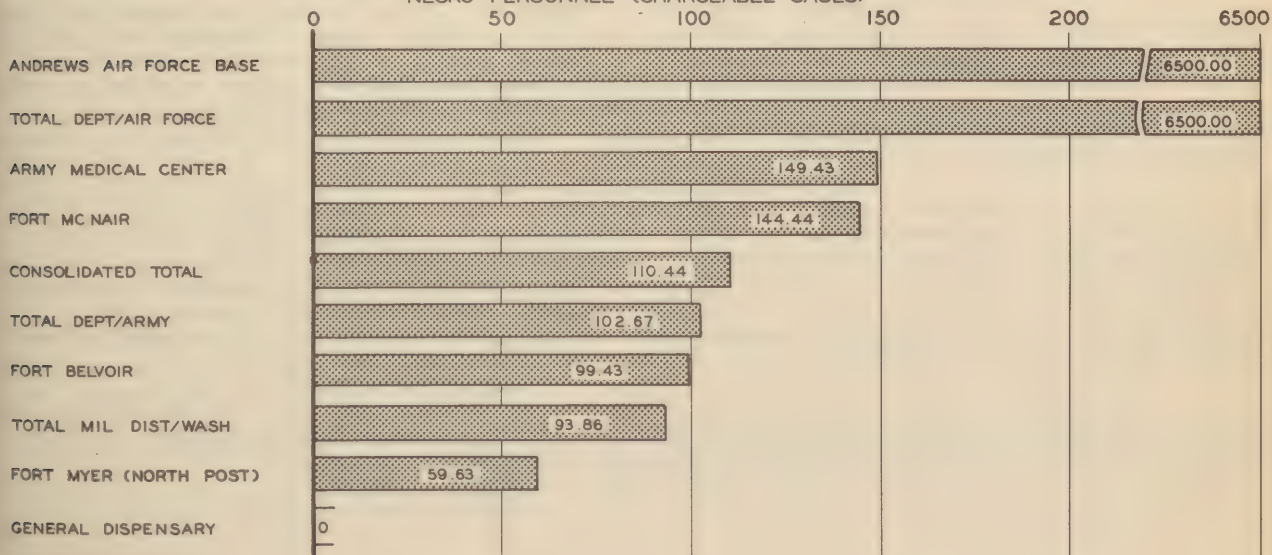
VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR FOUR WEEK PERIOD ENDING 25 FEBRUARY 49

WHITE PERSONNEL (CHARGEABLE CASES)



VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR FOUR WEEK PERIOD ENDING 25 FEBRUARY 49

NEGRO PERSONNEL (CHARGEABLE CASES)



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PREVENTIVE MEDICINE

ORGANIZATION FOR PREVENTIVE MEDICINE IN THE U.S. ARMY

The vast proportion of health service rendered troops is delivered by the unit surgeon. The Division of Preventive Medicine at command levels may indirectly shape local health service. The surgeon of a field Army may determine major policies for battalion surgeons. The Division Surgeon may set standards, promulgate regulations and even directly supervise activities; but the final determining factor in the effectiveness of a preventive medicine program is the worker in the locality where the problems are occurring. This is true in both peace and war, and the superstructure of specialized preventive medicine is primarily for his help and guidance.

The Division of Preventive Medicine in the Office of the Surgeon General sets major policies and supervises activities. It is the central organization for military preventive medicine. In the last war, the Division was expanded to a Preventive Medicine Service with ten functioning divisions, and was aided additionally by a variety of advisory boards and special commissions who not only advanced authoritative opinion, but initiated and conducted research on problems specifically related to military operations.

Field operations in preventive medicine centered about the Division of Preventive Medicine of the Office of the Theater Chief Surgeon which functioned in a policy-making, advisory and consultative capacity with no direct operational responsibility. The work of such a Division of Preventive Medicine as illustrated by the European Theater of Operations was distributed among eight sections--Epidemiology, Sanitation, Venereal Disease Control, Nutrition, Military Occupational Hygiene, Gas Casualties, Laboratories and Medical Intelligence. The next echelon of preventive medicine was at the Army Group. Here again the work was advisory and in consultation, with the staff limited to a single officer and his immediate assistants. The highest operational level was that of the Field Army, with the Division of Preventive Medicine ordinarily constituted as a four part organization made up of sections for epidemiology, sanitation, venereal disease and nutrition. The preventive medicine officer of a Corps was the Corps Medical Inspector with duties more advisory than operational. The work of the day fell to the Division Medical Inspector, as the last in line of the strictly professional preventive medicine workers. There is no intent to discount the position of the unit surgeon, to whom full credit has been given as the man who does the job. The Division Medical Inspector was the one to whom he turned for advice and help when situations extended beyond his individual resources.

This outline of the organization for preventive medicine in time of war serves to show that much more is included than the control of the communicable diseases. Nutrition for the first time in any war attained a position of quality with other preventive medicine activities. One is inclined to think of General Patton as the soldier, with interests wholly in operational affairs. The program for nutrition had no more enthusiastic supporter. Environmental sanitation held the important position it has always had. The emphasis on the venereal diseases through inclusion of this field among major interests was reflected in a record unsurpassed in American military practice. The impression is not to be gained that what has been described as standard organization and usual practice was by any means uniform. Preventive medicine received varying emphasis among the several field Armies, and accomplishment differed; but some armies set a record that will be a pattern for future plans.

Peacetime military conditions with fewer troops, less widely distributed activities and the opportunity for more leisurely and orderly development of policy and method naturally call for a simpler organization in preventive medicine. The Division of Preventive Medicine in the Office of the Surgeon General continues the overall supervision of activities. The Army areas of Continental United States have their divisions of preventive medicine, usually with well organized laboratory facilities. With the large wartime concentrations of troops no longer existing, the unit medical officer becomes more and more the key factor in delivery of preventive services.

Extracted from "Preventive Medicine in Military and Civilian Practice", by Colonel John P. Gordon, MC, A.U.S., Professor of Preventive Medicine and Epidemiology, Harvard School of Public Health, Boston, Massachusetts, "The Military Surgeon," January 1949.

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STREPTOMYCIN

One of the most interesting and potent antibiotics yet discovered is streptomycin. Unlike many other antibiotics, it has exhibited toxicity in man. It has produced neurologic sequelae following intensive treatment. Like many other toxic drugs, however, it is highly potent against infections resistant to all other known forms of chemotherapy. With increasing purification, it seems likely that the toxicity of this valuable drug will become unimportant clinically.

Pharmacology

Kornegay, Forgacs and Henley¹ have shown in experimental animals, following subcutaneous, intravenous, intradermal, intramuscular, and intraperitoneal injection, that maximum blood levels appear from fifteen to sixty minutes following its injection. Their results with human beings indicate that a dose of 30,000 units of streptomycin every 3 hours by intramuscular injection provides a blood level of from 1 to 2.5 units per cc., and that this level can be increased by large doses. Large amounts of the drug are eliminated by the kidneys, but daily variations occur. The drug is greatly concentrated during excretion, and urinary excretion is prolonged, lasting for about three weeks after cessation of treatment. The blood levels from a given dose of streptomycin, and during a therapeutic course of doses, vary extremely in the individual animal or man. The red and white cell counts are apparently unaffected by the drug. Therapeutic blood levels of the drug are not obtained by oral administration.

Some discussion of the toxicity of streptomycin is in order in view of the fact that the toxic reactions which have been mentioned most freely in the literature concern the central nervous system, and the eighth nerve and vestibular apparatus in particular. In 1946, Brown, of the Mayo clinic² reported his conclusions from the observation of 23 patients as follows: (1) streptomycin apparently exerts a toxic influence on the vestibular apparatus, under prolonged medication; (2) streptomycin probably also can cause a reduction in auditory acuity, although the coexistence of tuberculous meningitis clouded this picture; (3) whereas symptoms of involvement of the eighth nerve are not contraindications to administration of streptomycin in cases of serious types of tuberculosis--since compensation for a loss of labyrinthine function tends to occur--nevertheless, the physician must be constantly on the alert for a low pitched continuous tinnitus which indicates the onset of nerve deafness for low tones. Loss of labyrinthine function may be permanent. It is believed that withdrawal of the drug at the onset of tinnitus probably will prevent the development of serious deafness. Further study has indicated that much of the original toxicity of streptomycin was due to impurity and that the highly refined product now available is much less likely to produce neurological complication.

Clinical Usage

Pulmonary Tuberculosis

Streptomycin has been found useful in the treatment of tuberculosis. A very considerable amount of research has been done upon this subject, which cannot be summarized here for lack of space. This would be well worth-while if streptomycin were fully established as a relatively non-toxic and highly effective antibiotic against the infection for which it has been tried. Unfortunately, this is not the case.

There will be presented here a summary of two authoritative reports on this subject, together with a few pertinent abstracts from the literature.

The conclusions of the Subcommittee on Streptomycin, of the Committee on Therapy of the American Trudeau Society, approved by the Council on Pharmacy and Chemistry of the American Medical Association,³ may be summarized as follows:

(1) Intensive parenteral and intrathecal therapy with streptomycin is advised for tuberculous meningitis. Prompt treatment is of sufficient importance to justify its institution before complete bacteriologic data are available. Complete clinical remission occurs frequently enough to justify treatment of all cases, even though residual neurologic disorders are frequent.

(2) Streptomycin therapy is advised for all cases of acute hematogenous military tuberculosis. The remarks under (1) are applicable here also.

(3) Combined topical and parenteral therapy is advised for severe cases of tuberculous laryngitis and ulcerative tuberculous lesions of the oropharyngeal mucosa, even when the ultimate prognosis of an associated pulmonary tuberculosis appears grave. This is justified by the relief given to the patient.

(4) Streptomycin is advised for the treatment of progressive ulcerating lesions of the tracheobronchial tree, but not for those of fibrous strictures. Parenteral therapy is indicated. The value of adding aerosol to this is sub judice.

(5) Streptomycin is not at present indicated in pulmonary tuberculosis, except in tuberculous pneumonia, or where the physician considers that conventional treatment will be inadequate. Diffuse, extensive, progressive pulmonary lesions appear to respond best. At present, it should not be used in (a) chronic fibrous or fibro-caseous pulmonary tuberculosis; (b) acute destructive types, apparently terminal; (c) minimal or early moderate types of pulmonary tuberculosis or other cases with a favorable prognosis.

(6) Further trial of streptomycin is suggested in acute ulcerative tuberculous enteritis.

(7) Streptomycin is advocated for treatment of draining cutaneous sinuses of tuberculous origin.

(8) Streptomycin is not recommended for treatment of chronic tuberculous empyema.

(9) More extensive study is required to determine the value of streptomycin in preoperative and postoperative treatment, in genitourinary tuberculosis, in bone and joint tuberculosis, in tuberculosis of the eyes or of the skin, and in the treatment of tuberculous lymphadenitis without sinus formation.

(10) The toxic potentialities of streptomycin must be borne in mind and weighed against the seriousness of the individual case. The possible untoward reactions are disturbance of vestibular function, deafness, renal damage, cutaneous rashes.

Pending determination of the minimal effective doses, 1 to 2 Gm. parenterally in twenty-four hours is suggested, probably at intervals of four to six hours, for from three to four months. (vide infra).

The tendency of streptomycin to produce drug-resistant strains of organisms should limit its use to conditions in which it is definitely indicated.

Recently, a current status report has been published by the Council on Pharmacy and Chemistry⁴ of the American Medical Association on streptomycin. The most significant conclusions would appear to be the following: streptomycin therapy is not in itself specifically curative of tuberculosis, but it is highly useful in the following conditions--(a) tracheobronchial and laryngeal tuberculosis, (b) cutaneous sinuses and fistulae, (c) all cases of tuberculous meningitis and acute military tuberculosis, (d) tuberculosis lesions of bones and joints; (e) tuberculosis of the bladder (f) lesions of the alimentary tract, (g) tuberculous lesions of the mucous membranes; and (h) lymphadenitis.

The report also notes that reduction of dosage to 0.5 Gm. daily has occasioned no loss of therapeutic efficacy, and the daily dose may be divided into two rather than five injections. It is obvious that a great deal of further study is needed before streptomycin can be fully evaluated.

Two large series of cases, one of 650 at Battey State Hospital in Rome, Georgia,⁵ and one of 112 at the Minneapolis Veterans Administration Hospital⁶ have given us important information as to the value of streptomycin in various forms of tuberculous infection. It has been found that pulmonary tuberculosis shows less response to the drug than do other forms, and should, except in certain selected cases, be treated by the standard methods which are already in existence. In tubercu-

lous sinuses and fistulae, in tuberculosis of the gastrointestinal system, in laryngeal and tracheobronchial tuberculosis and in tuberculous lymphadenitis, streptomycin has brought about improvement or cure of the local lesions in between 85 and 90% of the cases. In genitourinary tuberculosis, improvement occurs in between 60 to 80% of the patients, while pain is relieved in at least 90%.

The experience of these two groups suggests that resistance to streptomycin may be minimized by reducing the dosage from the 2 Gm. per day originally advised to 1 or even 0.5 Gm. and that shorter periods of treatment (not exceeding sixty days in length) are also helpful. It was found that after 120 days of treatment 96% of the cultures had become resistant to dosages corresponding to 1 Gm per day, while after sixty days of treatment only 33% had become resistant. The most dramatic results of streptomycin have been those in tuberculous meningitis.

Pulaski and Seeley,⁷ in a comprehensive survey of streptomycin therapy in United States Army Hospitals, stated that in pulmonary forms of tuberculosis, administration of 2 to 3 Gm. a day, for periods of up to 120 days, resulted in improvement above and beyond what was expected from bed rest alone in 50% of the patients. Recent lesions, in the exudative phase of the infection, responded most readily but fibrotic lesions remained unchanged. The chances of cure are enhanced by the use of streptomycin in conjunction with collapse therapy. Protection is thus afforded against postoperative spread of infection.

Muschenheim and his colleagues⁸ agree with other workers that only two unequivocal indications for streptomycin treatment of tuberculosis can be said to exist at present, namely, miliary tuberculosis and tuberculous meningitis. Streptomycin is suppressive rather than curative and cannot be expected to eradicate well-established tuberculosis in man. It thus resembles other antibacterial agents. They confirm already published results which indicate that disturbances of equilibrium are the most important untoward reactions, and "that with overdosage or renal insufficiency, there may also develop deafness." This may occur, too, as a result of intrathecal administration, although since this is usually given for meningitis, the infection itself may be to blame.

Michele and Krueger,⁹ in reporting on a series of 12 cases of bone tuberculosis treated with streptomycin, felt that it is of definite value in this condition. They believe that the rapid recovery, not only from the general symptoms of illness but also from the local subjective and pathologic findings, can be attributed to streptomycin.

A very thorough study was made by a committee appointed by the Medical Research Council in Britain¹⁰ of 105 cases of tuberculous meningitis treated with streptomycin. The committee noted a marked difference in the results between those patients who were treated with intramuscular streptomycin alone and those receiving streptomycin by both intramuscular and intrathecal routes. In the first group only 11% made good progress as compared to 35% in the second group. It was found that in patients who ultimately fared badly, tubercle bacilli were isolated from the spinal fluid much more often during the first three weeks than in patients who improved under treatment. Results of treatment were less satisfactory in children under three years, of whom 82% died, than in older children and adults, of whom 56% died. As is so often found, patients treated early did very much better than those treated when in an advanced stage. Those admitted in early stages were making good progress in 42% of the cases, those admitted at a medium stage in 26%, and those admitted at an advanced stage in only 7%.¹¹

Urinary Tract Bacterial Infections

Provided that there is no obstruction to free urinary drainage and that the organisms concerned are susceptible to streptomycin, this antibiotic is effective in the treatment of infections of the urinary tract caused by Gram-negative bacilli. For best results, obstruction if present should be relieved as soon as possible after the start of streptomycin if not before.¹²

Pulaski and Seely⁷ studied 465 cases with infections of the urinary tract. Streptomycin was found to have a bacteriostatic effect in vitro on 87% of the bacteria recovered before treatment. The survey showed that if bacteria are not inhibited in vitro by a concentration of 16 mg. per cc., the chances of eliminating them by streptomycin treatment are poor. Of the 465 patients, complete cure was obtained in 34% and improvement in another 21%. The best results were obtained in *E. coli* infections, but failures were common when the organisms were *Ps. aeruginosa* and *S. fecalis*. Uncomplicated gonorrheal urethritis responded to streptomycin as brilliantly as to penicillin, except

where the prostate gland was involved. Standard methods of administration cannot produce an effective concentration of streptomycin in prostatic secretion, which explains its failure in prostatitis. Streptomycin is more effective in an alkaline medium,^{7,12} and it is essential that a suitable urinary pH be maintained during the entire period of treatment. At present, penicillin should be used in gonorrhea.

Bandler et al.¹³ in a survey of 15 cases of various types of genitourinary infection confirmed the findings of others to the effect that obstruction interferes with the successful results of streptomycin treatment. On the whole he and his colleagues felt that they had obtained very satisfactory results and consider that streptomycin is extremely useful in the preparation of a patient for operations for genitourinary obstruction. In this small series there was a 25% incidence of toxic reaction; 2 cases of labyrinthitis, 1 of involvement of the left recurrent laryngeal nerve and a mild and transitory involvement of the facial nerve.

Garvey and Canning¹⁴ believe streptomycin to be the most valuable agent so far developed for the treatment of urinary tract infections due to Gram-negative bacilli. In a series of 52 infections in 45 cases it was found that complications were the most frequent cause of failure. There were only 4 cures in 24 cases with complications, while of 28 uncomplicated cases, 25 were arrested. It is therefore very wise to make a complete study of any case for which streptomycin therapy has been proposed before starting treatment. In serious acute infections particularly those with bacteremia, it may be inadvisable to wait for such study and its use without investigation is warranted. In chronic cases with surgical complications the drug should be withheld until such obstructing factors have been removed as far as possible.

At the Veterans Administration Hospital, Newington, Connecticut, the therapeutic program consists of first alkalinizing the urine and then administering 4.4 Gm. of streptomycin daily for four days by intermittent intramuscular injection.¹²

Infections of the Respiratory Tract

Streptomycin has been used both intramuscularly and by aerosol in the treatment of infections of the respiratory tract caused by Gram-negative bacilli. The organisms most commonly found are those of the *KLEBSIELLA PNEUMONIAE* group (Friedlander's) and *H. INFLUENZAE*. For the treatment of acute pneumonia, Cressy¹² suggests the intramuscular use of streptomycin in doses of 2 to 4 Gm. daily for periods up to about ten days. The Friedlander bacillus is usually sensitive to the drug and numerous successfully treated cases have been reported, although the results are not uniformly good. *H. INFLUENZAE* pneumonitis usually responds favorably and promptly.

In the treatment of certain chronic pulmonary infections such as bronchiectasis, chronic bronchitis, streptomycin aerosol therapy may be employed. It is frequently effective in reducing the amount of sputum and decreasing the number of Gram-negative bacilli found in it. Hagens et al.¹⁵ found that a combination of penicillin and streptomycin aerosol therapy is valuable in most cases of bronchiectasis and bronchitis and of somewhat less help in cases of bacterial asthma. Streptomycin and penicillin may be nebulized together if the sodium salt of penicillin is used, but with penicillin calcium the two antibiotics must be nebulized separately. They found that a daily total of 200,000 units of penicillin and 500,000 units of streptomycin given in 16 treatments for twenty-four hours is usually sufficient. Cressy,¹² however, considers that the results are temporary and that the organism is likely to reappear with greatly enhanced resistance.

Durant and his colleagues¹¹ have reported 3 cases of cure of pulmonary infection due to *H. INFLUENZAE* type B effectively treated by streptomycin. One case was an overwhelming acute pneumonitis which would otherwise probably have been fatal; the second was an acute episode in the course of chronic bronchiectasis, and in the third there was persistent infection following lobectomy for suppurative pneumonitis. In two of the cases the intrabronchial route of administration was effective alone.

Meningitis

The results of streptomycin treatment of meningitis have in general been satisfactory when the infection was due to a susceptible organism, and when the drug has been started early. The causative organisms reported have included *H. INFLUENZAE*, *B. PROTEUS*, *B. COLI*, *Ps. PYOCYANEA*. In

moderate or mild cases streptomycin may be sufficient alone, but in severe or in resistant cases other adjunctive therapy has been advised, such as the use of sulfadiazine, specific serum, heparin, air injection.^{16, 17} A rare cause of acute meningitis is infection of NEISSERIA SICCA, but one case of this sort has been reported¹⁸ with response to streptomycin. Sulfadiazine and penicillin were also employed, but the case history suggests that the major part of the improvement was due to streptomycin.

Tularemia

Rapidly accumulating evidence has indicated that streptomycin is of great value in the treatment of tularemia.^{19, 20} The dosage schedule used by various workers has been by no means uniform, but it would seem that a practical effective dose varies between 0.5 and 1 Gm. daily by intermittent intramuscular injection. The response to streptomycin has been frequently characterized as dramatic and the length of illness is in almost every case drastically reduced.

Administration of Streptomycin

Streptomycin is now measured by weight, the unit being Immicrogram. This corresponds to the "S" unit, introduced by Waksman initially, and used in all the earlier literature. It is therefore necessary to translate the unitage in earlier papers into terms of micrograms.

In addition to its value when given intramuscularly, the drug has proved useful when administered intrathecally, intraperitoneally, intrapleurally and by aerosol. It is excreted chiefly in the urine, becoming highly concentrated in its passage. This is of considerable importance in the treatment of urinary tract infections. When given intrathecally it is fairly well retained and will maintain levels of from 5 to 6 micrograms per cubic centimeter for twenty-four to forty-eight hours following an injection of 50 mg. in 6 to 8 cm. of spinal fluid or sterile saline.

No hard and fast rule can be laid down for the dosage of streptomycin, since it has been found to be extremely variable. It is now realized that large doses must be given at the beginning to bring the infection under control before resistance to the drug can be developed, since even organisms which were originally susceptible have been found to build up resistance quite rapidly. The trend is in the direction of small dosage, however. Workers in this field uniformly stress the importance of identification of the infecting organism and determination of its susceptibility before beginning treatment.²¹

Extracted from "Recent Trends in Antibiotic Therapy" by Lederle Laboratories

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RESTRICTED**VETERINARY SERVICE****VETERINARY PREVENTIVE MEDICINE**

Veterinary preventive medicine is the science and art of preventing disease in animals and controlling or preventing the propagation and dissemination of those diseases transmissible from animal to man, thereby prolonging life, improving health and efficiency and increasing food resources.

There are approximately 80 animal diseases known in the world today that can be transmitted from animals to man. Diseases of this kind are of Public Health significance. The major diseases of animals and birds that can be transmitted to the human being include bovine tuberculosis, anthrax, brucellosis, glanders, swine erysipelas, salmonella food infections, listerellosis, rabies, psittacosis, pox diseases, equine encephalomyelitis (sleeping sickness) Japanese encephalitis and "Q" fever. Several are significant and might even be classified as industrial diseases since they are most often found infecting those people closely associated with animals, such as the farmer, veterinarian, packing house employees, and disease research personnel. Rodents are known to be reservoirs and carriers of plague, tularemia, leptospirosis, rat bite fever, Rocky Mountain spotted fever, endemic relapse fever, typhus fever, salmonella food infections and "Q" fever.

The relation of man to animals in the field of preventive medicine becomes more important as investigations of the past and those conducted currently reveal additional diseases of this nature. As this list of diseases grows, the role of the veterinarian becomes more important in the field of comparative medicine and public health.

The Medical Department, as one of its missions, conducts a large effective preventive medicine program. The Army Veterinary Service, as a part of the Medical Department, aids in carrying out this program of maintaining the health of the members of the Armed Forces, by caring for animals that are a part of the various military establishments.

POUND MEAT, MEAT FOOD AND DAIRY PRODUCTS INSPECTED FEBRUARY 1949
(Data obtained from WD AGO Form 8-134)

STATION	CLASS * 3	CLASS * 4	CLASS * 5	CLASS * 6	CLASS * 7	CLASS * 8	CLASS * 9	TOTAL
Fort Lesley J. McNair		57,522	94,685		152,207	10,965		315,379
Fort Belvoir, Virginia		308,863	208,220	1,277	535,448	58,899		1,112,707
Potomac Yards Distribution Point		241,539	113,471	370,084	44			725,138
Fort Myer, Virginia		184,548	163,857		354,078	7,124		709,607
Mil Dist/Washington Vet. Det.	308,125							308,125
US Navy	98,396							98,396
The Pentagon						274,271		274,271
Total	406,521	792,472	580,233	371,361	1,041,777	351,259		3,543,623
Army Medical Center		176,417	70,621		247,038	6,420		500,312
Washington Quartermaster		107,405	61,112		175,199	7,596		351,312
Andrews Air Force Base		78,034	76,461		142,809	18,471		315,775
Bolling Air Force Base		135,690	130,319		258,703	21,640	2,633	548,985
Total		497,546	338,513		823,749	54,127	2,633	1,716,568
Grand Total	406,521	1,290,018	918,746	371,361	1,865,526	405,386	2,633	5,260,191
REJECTIONS:								
Potomac Yards Dist Point								
Not type, class or grade		253						253
Fort Myer								
Insanitary or Unsound		857			385			1,242
US Navy								
Not type, class or grade	11,191							11,191
Mil Dist/Washington Vet. Det.								
Not type, class or grade	7,850							7,850
Mil Dist/Washington Vet. Det.								
Insanitary or Unsound	4,680							4,680
Army Medical Center								
Not type, class or grade		50						50
Army Medical Center								
Insanitary or Unsound		100						100
TOTAL REJECTIONS	23,721	1,260			385			25,366

* Class 3 - Prior to Purchase

* Class 7 - At Issue or Sale

* Class 4 - On delivery at Purchase

* Class 8 - Purchases by Post Exchanges, Clubs, Messes or Post Restaurants

* Class 5 - Any Receipt Except Purchase

* Class 9 - Storage

* Class 6 - Prior to Shipment

RESTRICTED

MISCELLANEOUS

RESTRICTED

OUTPATIENT SERVICE

Consolidated statistical data on the outpatient service, Military District of Washington, less Walter Reed General Hospital, and Class III installations for the four week period ending 25 February 1949, are indicated below:

ARMY:

Number of Outpatients..... 12,527
Number of Treatments..... 16,630

NON ARMY:

Number of Outpatients..... 7,868
Number of Treatments..... 13,293

NUMBER OF COMPLETE PHYSICAL EXAMINATIONS CONDUCTED... 1,589

NUMBER OF VACCINATIONS AND IMMUNIZATIONS ADMINISTERED 5,433

HOSPITAL MESS ADMINISTRATION (Data from WD AGO Form 8-210)

STATION	November 48	December 48	January 49	February 49
FORT BELVOIR				
Income per ration	\$ 1.187	\$ 1.146	\$ 1.165	\$ 1.113
Expense per ration	1.267	1.203	1.067	1.015
Gain or Loss	-0.090	-0.057	+0.098	+0.098
FORT MYER				
Income per ration	1.198	1.150	1.273	-
Expense per ration	1.036	1.092	1.421	-
Gain or Loss	+0.160	+0.059	-0.148	-

DENTAL SERVICE - MONTH OF FEBRUARY 1949

STATION	Offi- cers	Days of Duty	Sit- tings	Amal- gam	Oxy and Amal	Sili- cate	In- lays	Bridges	Bridge Repair	Crowns	Dentures			Extrac- tions	Calcu- lus Removed	X-Rays	Examin- ations
											Full	Par- tial	Re- pair				
Fort Belvoir	6	131	1,878	318	510	272	2	1	0	0	18	20	19	375	135	170	847
Fort McNair	1	28	352	244	79	53	0	0	1	0	3	6	6	28	46	75	91
Fort Myer (North Post)	1	21	761	145	31	25	2	0	0	0	3	7	9	66	9	791	352
Fort Myer (South Post)	1	28	440	110	28	22	0	0	1	0	3	8	1	68	7	150	92
General Dispensary, USA	3	81	1,577	161	64	50	0	1	8	1	12	29	15	81	144	334	765
All Others	1	27½	195	94	18	22	2	0	0	0	0	2	2	17	0	23	78
Total Mil Dist of Wash	13	316½	5,203	1,072	730	444	6	2	10	1	39	72	52	635	341	1,543	2,225

Number of Civilian Dentists and hours worked not included in column 1 and 2 of the above table.

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RESTRICTED**ADMINISTRATIVE DIVISION**

Following is a list of publications which are of particular interest to the Medical Department:

DEPARTMENT OF THE ARMY CIRCULARS

Cir No	Subject	Date
16	Utilization of Army Food Service School Personnel	3 February 49
19	Conversion of Positions for Warrant Officers	7 February 49
19	DA Special Orders	7 February 49
19	Medical Departments Items	7 February 49
21	Submission of Applications for Family Allowance	16 February 49
23	NME Form 110 - WD Form 48 Replaced	25 February 49
25	Appointment of Warrant Officers (Junior Grade) for the Unit Administrator Career Warrant	25 February 49

MILITARY DISTRICT OF WASHINGTON MEMORANDA

Memo No	Subject	Date
9	Roster of Officers Under MDW Jurisdiction	1 February 49
11	SOP for Requisitions in MDW	8 February 49
12	National Military Establishment	11 February 49
13	Directory and Station List, MDW	14 February 49
14	Distribution List	15 February 49
15	Soldiers' Savings Program	21 February 49

SPECIAL REGULATIONS

SR No	Subject	Date
32-210-5	Classification of Serviceable Used Clothing and Equipage	11 February 49
40-590-10	Hospital Fund Limitation	24 February 49
55-100-10	Travel Orders for Military Personnel	28 February 49
55-350-2	Transport Surgeon's Report	16 February 49
310-20-1	Numbering of Department of the Army Publications	9 February 49
780-13-1	Depot Missions - Medical Department	9 February 49

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